

**Montana Board of Research and Commercialization Technology**  
**Board Meeting Teleconference**  
**June 27, 2008**

**Members**      John Youngberg, Chairman

**Attending:**   Marty Connell  
                    Jim Davison  
                    Todd Graetz  
                    Larry Hall

**Others**         Dave Desch, Executive Director

**Attending:**    Jane Todd, Administrative Specialist

**I. Call to Order**

Chairman Youngberg called the meeting to order at 10:10 a.m.

**II. Approval of Minutes from 6/18/08 Board Meeting**

Chairman Youngberg asked for discussion of the minutes of the June 18, 2008, Board meeting. There being no discussion, Marty Connell moved to approve the minutes as presented. Jim Davison seconded the motion. All in favor, the motion carried.

**III. Proposals Submitted March 3rd – Discussion and Funding Decisions**

A discussion was held regarding presentations made in Bozeman on June 18<sup>th</sup> and the new requirement passed by the 2007 Legislature that 30% of the funded projects must be to support clean coal research and development, or renewable resource research and development. It was noted that the Board has consistently maintained the statutorily required 20% level for production agriculture projects. The Board then discussed the following projects:

#09-19 PDT Cancer Treatment Depth Efficacy Studies Using the Transplantable Rabbit VX2 Carcinoma Jean Starkey – Montana State University – Bozeman Year One - \$60,000
--

#09-43 Developing Laboratory Applications for Inhibitors of Fungal Morphogenesis Kurt Toenjes – Montana State University – Billings Year One - \$121,413 Year Two - \$128,984
--

#09-09 A Frequency Agile Digital Beamforming Antenna for WiMAX Radio Wireless Networks Yikum Huang – Montana State University – Bozeman Year One - \$79,197 Year Two - \$81,037
--

June 27, 2007

#09-57 Development and Commercialization of a Biomass Based Photobioreactor for CO2 Sequestration with Applications in Clean Coal Energy Production

David Tooke – Sustainable Systems – Missoula

Year One - \$240,750

Year Two - \$134,250

#09-47 Development of Germination Techniques for *Carex*, *Scripus* and *Eleocharis Species*

Tim Meikle – Great Bear Restoration – Hamilton

Year One - \$39,234

#09-28 MEMS Variable Focus Lens: Technology Development for Commercial Applications in Medical Imaging and Consumer Electronics

David Dickensheets – Montana State University – Bozeman

Year One - \$132,208

Year Two: \$17,792

#09-35 New Fluorescent Biosensors for Drug Discovery

Anne Marie Quinn – Montana Molecular – Bozeman

Year One - \$75,000

#09-21 Heat-Tolerant Spring Wheat for Montana

Luther Talbert – Montana State University – Bozeman

Year One - \$75,000

Year Two - \$75,000

#09-51 Preclinical Development of Low Dose Methamphetamine as a Neuroprotective Agent Following Stroke and Traumatic Brain Injury

David Poulsen – The University of Montana – Missoula

Year One - \$202,790

#09-07 Development of an ICP Etch Process for Nonlinear Optical Materials

Phillip Hammer – Montana State University – Bozeman

Year One - \$78,728

#09-23 WiMAX-Based Relay Node with Smart Adaptive Antennas for Mesh Networking

Jian Tang – Montana State University – Bozeman

Year One – 117,207

Year Two - \$119,673

June 27, 2007

#09-20 Development of Bismuth-Thiol Based Therapeutic Agents for Treating Chronic Wounds

Philip Stewart – Montana State University – Bozeman

Year One - \$100,470

#09-61 Commercialization of Low Vibration Cryocooler Technology

Luke Mauritsen – S2 Corporation – Bozeman

Year One - \$116,075

#09-26 Control of Microbial Processes for Enhanced Water Treatment Using Floating Island Treatment Systems

Alfred Cunningham - Montana State University – Bozeman

Year One - \$125,158

Year Two - \$125,158

#09-33 Research Support for Standardizing a Comprehensive Biofilm Efficacy Test System

Darla Goeres – Montana State University – Bozeman

Year One - \$66,985

Year Two - \$66,985

#09-40 Resource Assessment of Deep Coals in Eastern Montana: Potential Targets for Commercialization by In-Situ Gasification

Jay Gunderson – Montana Bureau of Mines and Geology – Billings

Year One - \$119,360

Year Two - \$29,974

#09-56 Research and Commercialization of the SepticNET™ Nutrient Removal Technology

Steven Anderson – Water & Environmental Technologies, PC – Butte

Year One – 187,038

#09-59 Enhancement of Montana Coal to Support Future Expansion Sodium Removal Technology Development

Corby Anderson – CAMP/Montana Tech – Butte

Year One – \$105,000

#09-62 Commercialization of Clean Coal Production of Methane and Humic Acid: Stage I

Paul Gatzemeier – Coal Black Liquids LLC – Billings

Year One - \$235,000

Year Two - \$180,000

*June 27, 2007*

<p>#09-13 Improving Milling and End Use Quality of Montana Wheat John Martin – Montana State University – Bozeman Year One - \$69,630 Year Two - \$69,630</p>
---

**Action:** Marty Connell moved that the Board fund the above-listed projects. Larry Hall seconded the motion, and the motion carried unanimously.

**IV. Public Comment**

There was no public comment.

**V. Miscellaneous**

- a) Larry Hall, out-going Board member, was acknowledged for his contributions to the Board.
- b) Information will be provided to Board members for their use in describing the merits of the program to interested parties.

**VI. Adjourn**

Larry Hall moved to adjourn the meeting; Marty Connell seconded the motion and Chairman Youngberg adjourned the meeting at 10:55 a.m.

Respectfully submitted,

---

John Youngberg, Chairman